

IN THE CLAIMS

1. (Currently Amended) An apparatus comprising ~~A method for handling an exception in a business-to-business transaction comprising:~~

one or more processors; and

a memory coupled to the processors comprising instructions executable by the processors, the processors operable when executing the instructions to:

forward packetized workflow procurement process communications exchanged between a customer endpoint and a supplier endpoint over first and second networks, the packetized workflow procurement process communications representing one or more purchasing transactions exchanged between transactional parties;

monitor the packetized workflow procurement process communications to determine whether final receipts are sent between the transactional parties to indicate consummation of the purchasing transactions, and when the purchasing transactions are not consummated, identify one or more exceptions associated with disrupting consummation of the purchasing transactions;

generate a notification indicating a failure condition for the identified transactions when the identified exceptions correspond to a flagged type;

access a database that lists both potential distributees for the generated notification including agents corresponding to the transactional parties and business information corresponding to the agents;

generate, using the database and according to the business information, a ranked listing of the agents for intelligently distributing the generated notification; and

distribute the generated notification to one or more of the agents intelligently according to the ranked listing to resolve the identified exceptions.

~~monitoring an internet gateway through which the business-to-business transaction passes for exceptions, wherein the exceptions comprise timer expiration exceptions issued when a sending application does not receive a confirmation within a predetermined amount of time, transaction exceptions generated when content, format, security availability or other characteristics of the transaction are out of pre-determined boundaries, and network exceptions issued when a message infrastructure cannot support the message transaction, wherein if an exception is detected:~~

~~using an intelligent contact manager to automatically locate an authorized representative from a hierarchical list of designated persons, wherein the authorized representative is a designated person who has authority to consummate the business-to-business transaction;~~

~~using a unified communication system to automatically notify the authorized representative of the exception;~~

~~if said authorized representative fails to send a confirmation acknowledging notification of said exception, repeating said using an intelligent contact manager and said using a unified communication system to locate and to notify another authorized representative that is different from the previously located authorized representative from said hierarchical list until receipt of said confirmation from any notified authorized representative; and if necessary, automatically establishing a web collaboration session between representatives of the business-to-business transaction to resolve said exceptions.~~

2. (Cancelled)

3. (Currently Amended) The apparatus of claim 1 wherein the processors are further operable to:

determine whether the identified exceptions correspond to a first flagged type that occurs when a sending application does not receive a confirmation within a predetermined time period, a second flagged type that occurs when either the first or second network are unable to transfer one or more of the packetized workflow procurement process communications, or a third flagged type that occurs when the packetized workflow procurement process communications include an out of bounds security parameter;

generate the notification when the identified exceptions correspond to one or more of the flagged types; and

format the generated notification to indicated the determined flagged type ~~The method of Claim 1, wherein the intelligent ebi-itact manager comprises the functions of pre-routing, post-routing, customer profile, computer telephony integration, enterprise-wide reporting, web interaction, remote agent support, voice recognition, and workforce management integration.~~

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Currently Amended) The apparatus method of Claim 3 wherein the processors are further operable to compare the determined flag type to the business information for ranking the agents for intelligent distribution of the generated notification 1, ~~wherein the unified communication system comprises voice messaging, email messaging, and fax messaging.~~

8. (Currently Amended) The apparatus method of Claim 1, wherein the processors are further operable to:

receive fulfillment offers from a plurality of vendors;

rank the suppliers according to proposed prices and delivery times included in the fulfillment offers to select a supplying one of the transactional parties;

send the selected supplying one of the transactional parties a purchasing request; and

identify the exception of the flagged type when the selected supplying one of the transactional parties does not respond to the purchasing request in a predetermined amount of time ~~unified communication system comprises a telephone call, a sequence of contacts, an SMS message to a called party's pager or cell phone, or incoming calls being routed through a series of telephone numbers based on peer, person or LDAP list.~~

9. (Cancelled)

10. (Currently Amended) The apparatus method of Claim 1 wherein the processors are further operable to:

determine whether the identified exceptions require involvement from more than one of the agents;

establish a collaboration session between the required agents independently of any requests from the required agents when the identified exceptions require involvement from more than one of the agents; and

send the generated notification to the required agents automatically and independently of any prompting from the required agents ~~further comprising the step of handling exceptions corresponding to demand planning.~~

11. (Currently Amended) The apparatus method of Claim 1 wherein the processors are further operable to:

send one or more messages to a highest ranked one of the agents included in the ranked list;

observe any responses from the highest ranked agent to determine whether the highest ranked agent can be located; and

send the same or other messages to a second highest ranked one of the agents included in the ranked list when the responses are not observed ~~business-to-business (B2B) processing utilizes the an engine to perform steps of requisitioning, purchasing, approval, ordering, receiving, distribution, payment, and measurement.~~

12. (Currently Amended) The apparatus method of Claim 1 wherein the processors are further operable to:

identify a customer segment associated with a purchasing one of the transactional parties; and

rank the listing of potential distributees for the generated notification based on the identified customer segment ~~further comprising the step of handling exceptions corresponding to procurement processes.~~

13. (Currently Amended) The apparatus method of Claim 1 wherein the processors are further operable to:

analyze the business information included in the database to identify a location for contacting a highest ranked one of the agents included in the ranked listing; and

send one or more messages to the highest ranked agent, the messages addressed to the identified location ~~wherein the business-to-business transaction is handled through e-mail and LDAP containing XML data.~~

14. (Currently Amended) The apparatus method of Claim 1 wherein the processors are further operable to:

identify a portion of the business information in the database that forecasts customer volume; and

rank the listing according to the portion of the business information that forecasts customer volume to effectively allocate agent resources , wherein the exception is handled by email.

15. (Currently Amended) A method comprising ~~An apparatus for handling exceptions in a business-to-business transaction, comprising:~~

forwarding packetized workflow procurement process communications exchanged between a customer endpoint and a supplier endpoint over first and second networks, the packetized workflow procurement process communications representing one or more purchasing transactions exchanged between transactional parties;

detecting one or more exceptions that disrupt the purchasing transactions by analyzing the packetized workflow procurement process communications during the forwarding of the packetized workflow procurement process communications;

identifying a listing of agents associated with the transactional parties using a database, the database providing business information that indicates job skills respectively belonging to the agents and schedules for the agents;

filtering the identified agent listing according to whether the respective job skills correspond to the detected exceptions;

filtering the identified agent listing according to whether the respective schedules correspond to a time that the exceptions are detected; and

establishing a session with at least one agent selected from the filtered agent listing, the session used for indicating the detected exception to the selected agent and resolving the exceptions that disrupted the purchasing transaction.

~~an exception detector which monitors an internet gateway through which the business-to-business transaction passes for exceptions, wherein the exceptions comprise timer expiration exceptions issued when a sending application does not receive a confirmation within a predetermined amount of time, transaction exceptions generated when content, format, security~~

availability or other characteristics of the transaction are out of the predetermined boundaries, and network exceptions issued when a message infrastructure cannot support the message transaction;

~~an intelligent contact manager coupled to the exception detector to automatically locate an authorized representative from a hierarchical list of designated persons, wherein the authorized representative is a designated person who has authority to consummate the business-to-business transaction;~~

~~a unified communication system coupled to the intelligent contact manager which automatically notifies the authorized representative of the exception if said authorized representative fails to send a confirmation acknowledging notification of said exception, said intelligent contact manager and said unified communication system continue to locate and to notify another authorized representative from said hierarchical list until receipt of said confirmation from any notified authorized representative; and~~

~~a collaboration system coupled to the unified communication system which automatically establishes a web collaboration session between representatives of the business-to-business transaction, wherein the web collaboration session comprises at least one of page sharing, follow-me, form share, text chat, application demonstration, application sharing, and white boarding functions.~~

16. (Currently Amended) The method apparatus of claim 15 further comprising, before establishing the session, filtering the identified agent listing according to a customer segment associated with the customer endpoint, wherein the intelligent contact manager comprises the functions of pre-routing, post-routing, customer profile, computer telephony integration, enterprise-wide reporting, web interaction, remote agent support, voice recognition integration, and workforce management integration.

17. (Cancelled)

18. (Cancelled)

19. (Currently Amended) The method apparatus of claim 15 further comprising:
identifying an Interactive Voiced Response (IVR) system used by the agents included in
the identified agent listing;

observing load information that indicates both a first amount of load currently
experienced by a first portion of the IVR system that is associated with a first subset of the
agents and a second different amount of load currently experienced by a second portion of the
IVR system that is associated with a second subset of the agents; and

filtering the identified agent list according to the observed load information before
establishing the session, ~~wherein the unified communication system comprises voice messaging,~~
~~email messaging, and fax messaging.~~

20. (Currently Amended) The method apparatus of Claim 19, wherein one of the
subsets of the agents is filtered from the identified agent list when a respective portion of the
IVR system is overloaded ~~the unified communication system comprises a telephone call, a~~
~~sequence of contacts, an SMS message to a called party's pager or cell phone, or incoming calls~~
~~being routed through a series of telephone numbers based on availability and schedules.~~

21. (Cancelled)

22. (Currently Amended) The method apparatus of Claim 15 further comprising,
before establishing the session, filtering the identified agent listing according to data that
forecasts different contact-volume amounts for the different agents included in the identified
agent listing such that the session is not established with one of the agents that is forecasted to be
overloaded ~~wherein the apparatus handles exceptions corresponding to demand planning.~~

23. (Currently Amended) The method apparatus of Claim 22 further comprising
automatically selecting between a number of different media types for establishing the session
with the at least one agent according to a respective one of the schedules, ~~wherein the business-~~
~~to-business pmourement transaction includes business-to-business requisitioning, purchasing,~~
~~approval, ordering, forecasting, receiving, distribution, payment, and measurement.~~

24. (Currently Amended) The method apparatus of Claim 23 wherein the different media types include email systems, fax systems and telephone systems apparatus handles exceptions corresponding to procurement processes.

25. (Previously Presented) A computer-readable medium having stored thereon instructions for handling exceptions in a business-to-business transaction, comprising the steps-of:

monitoring an internet gateway through which the business-to-business transaction passes for exceptions, wherein the exceptions comprise timer expiration exceptions issued when a sending application does not receive a confirmation within a predetermined amount of time, transaction exceptions generated when content, format, security availability or other characteristics of the transaction are out of pre-determined boundaries, and network exceptions issued when a message infrastructure cannot support the message transaction, wherein if an exception is detected:

using an intelligent contact manager to automatically locate an authorized representative from a hierarchical list of designated persons, wherein the authorized representative is a designated person who has authority to consummate the business-to-business transaction;

using a unified communication system to automatically notify the authorized representative of the exception;

if said authorized representative fails to send a confirmation acknowledging notification of said exception, repeating said using an intelligent contact manager and said using a unified communication system to locate and to notify another authorized representative that is different from the previously located authorized representative from said hierarchical list until receipt of said confirmation from any notified authorized representative; and if necessary, automatically establishing a web collaboration session between representatives of the business-to-business transaction, wherein the web collaboration session comprises at least one of page sharing, follow-me, form share, text chat, application demonstration, application sharing, and white boarding functions.

26. (Cancelled)

27. (Original) The computer-readable medium of Claim 25, wherein the business-to-business transaction is handled through e-mail and LDAP containing XML data.

28. (Original) The computer-readable medium of Claim 25, wherein the exception is handled by e-mail.

29. (Currently Amended) A system ~~computer system for handling exceptions, wherein the exceptions comprise timer expiration exceptions issued when a sending application does not receive a confirmation within a predetermined amount of time, transaction exceptions generated when content, format, security availability or other characteristics of the transaction are out of pre-determined boundaries, and network exceptions issued when a message infrastructure cannot support the message transaction in a business-to-business transaction,~~ comprising:

means for monitoring packetized communications being forwarded through an internet gateway through to determine whether one or more business to business purchasing transactions are consummated, and when the purchasing transactions are not consummated according to the monitoring, identifying one or more exceptions associated with disruption of the purchasing transactions which the business-to-business transaction passes for the exceptions, wherein if an exception is detected;

means for accessing a network database storing business data responsive to identifying the exceptions, the business data indicating: using

skill information for making skill-based routing decisions when selecting one or more appropriate persons to authorize a response to the detected exceptions
an intelligent contact manager to automatically locate an authorized representative from a hierarchical list of designated persons, wherein the authorized representative is a designated person who has authority to consummate the business-to-business transaction;

scheduling information for making scheduling-based routing decisions when selecting the appropriate persons to authorize the response to the detected exception; and

load balancing information for making Interactive Voice Response (IVR) infrastructure-load routing decisions when selecting the appropriate persons to authorize the response to the detected exceptions;

means for selecting one or more appropriate persons to authorize the response to the detected exceptions according to the business data;

means for using a unified communication system to automatically notify the appropriate persons authorized representative of the detected exceptions exception;

means for receiving a confirmation acknowledging notification of said detected exceptions exception, wherein said means for using an intelligent contact manager and said means for using a unified communication system continue to locate and to notify another authorized representative that is different from the previously located authorized representative from said hierarchical list until receipt of said confirmation from any notified authorized representative; and

means for automatically establishing establishes a web collaboration session after receiving the confirmation between representatives of the business to business transaction, wherein the web collaboration session comprises at least one page sharing1 follow me, form share, text chat, application demonstration, application sharing, and white boarding functions.

30. (Cancelled)

31. (Currently Amended) The computer system of Claim 29 wherein the network database and the business data are formatted according to the Lightweight Directory Access Protocol (LDAP) further comprising means for handling business to business transaction through e-mail and LDAP containing XML data.

32. (Currently Amended) The computer system of Claim 29 wherein the network database and the business data are formatted according to an extensible markup language protocol further comprising means for handling the exception of e-mail.

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (New) The apparatus of claim 1 wherein the processors are further operable to:
analyze the business information to identify respective job skills belonging to the agents
and availability schedules for the agents; and
generate the ranked listing of the agents according to whether the identified agent job
skills correspond with the failure conditions and according to whether the identified availability
schedules for the agents correspond to a current time.